

# Delivery structures

There are 5 models used to deliver a heat network:

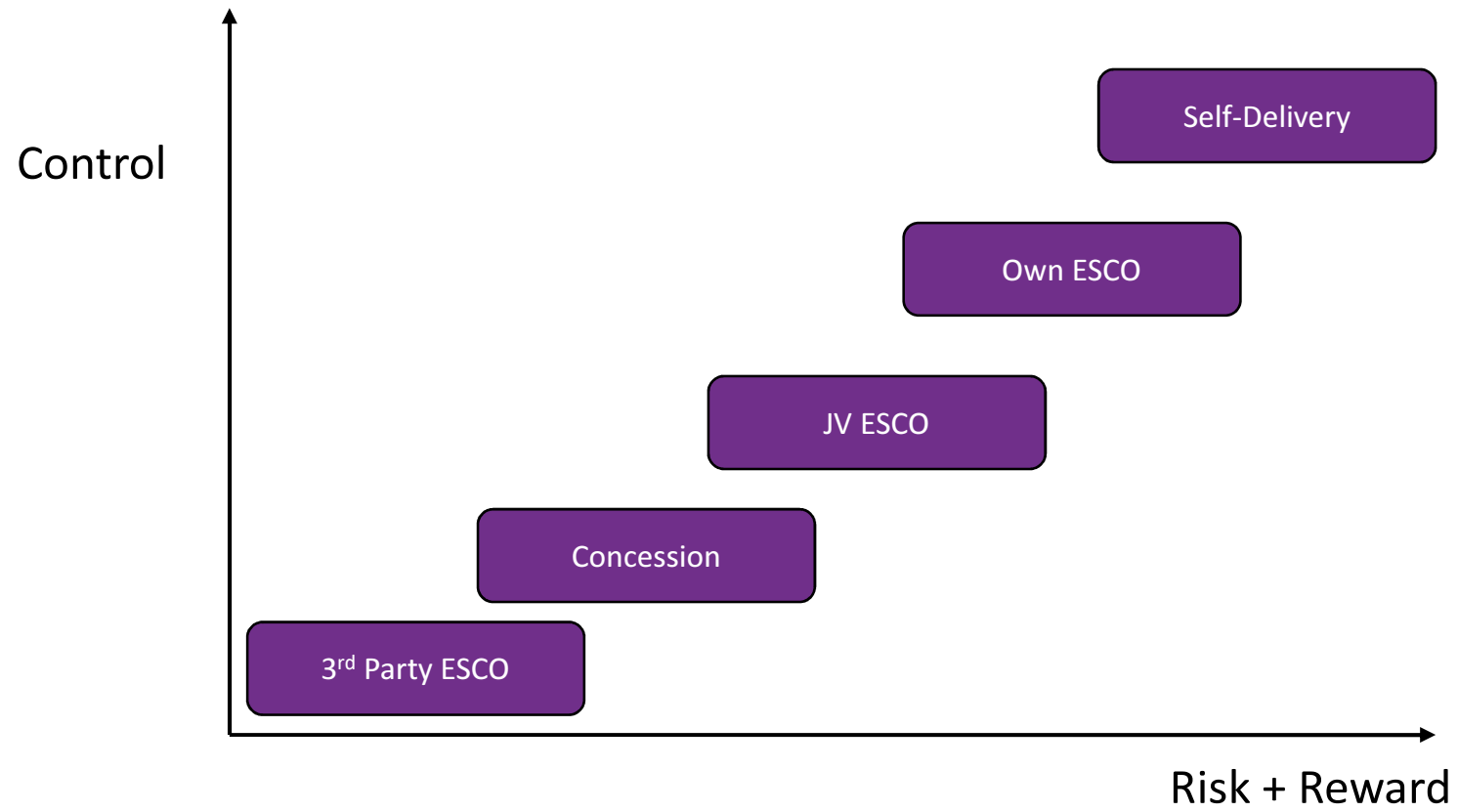
1. 3<sup>rd</sup> party ESCO
2. Concession
3. JV ESCO
4. Wholly owned ESCO
5. In-house delivery

Suitability and applicability determined by desired operating model

- Level of control, risk, returns

Project needs to set up an SPV in order to secure HNIP funding

# Delivery Vehicles



## Categories of delivery model (DPD Guidance)

Private Sector Lead	Public-private	Public sector led	Community Company
Private sector company responsible for design, financing, building, owning and operation.	Local Authority and at least one private sector company share the risks and returns	Local Authority responsible for design, financing, building, owning and operation.	A community body has leading role in the business supplying heat.
The roles that define a project as private sector led are likely to be Funding, Asset Ownership and Operation	The roles that if shared define a project as private-public led are likely to be Governance and Funding or anchor customer	The roles that define a project as public sector led are likely to be Governance, Funding and Asset ownership.	The roles that define a project as Community led are likely to be Customer, Funding, Governance and Sale of Heat.
3 <sup>rd</sup> Party ESCo / Concession	JV ESCo	Own (SPV) ESCo / Self-delivery	Own ESCo / CoCo

# Case Studies

3 <sup>rd</sup> Party	Concession	JV ESCO	Wholly owned	Self Delivery
Leicester	Birmingham	Kings Cross	Lee Valley Heat Network (energetik)	Islington
<ul style="list-style-type: none"> <li>• 25yr partnership with ENGIE for heat and hot water</li> <li>• Leicester District Energy Company (LDEC) wholly owned by ENGIE</li> <li>• Investment from Engie (£14m) and Community Energy Saving Programme (£1m)</li> <li>• &gt;14km of insulated pipework, 79GWh/a of heat</li> <li>• 3,000 Council homes, 19 civic buildings</li> <li>• CHP + biomass boiler</li> </ul>	<ul style="list-style-type: none"> <li>• 25yr concession signed 2006 with ENGIE</li> <li>• all built and operated by ENGIE through the Birmingham District Energy Company (BDEC)</li> <li>• City centre, Aston University, Birmingham Childrens Hospital</li> <li>• Customers (including the council) supplied by ESCO</li> <li>• CHP / tri-generation currently</li> <li>• 56 GWh/a of heat</li> </ul>	<ul style="list-style-type: none"> <li>• JV between Argent (developer) and Metropolitan</li> <li>• Argent responsible for installation of the primary network. Then JV took over.</li> <li>• 2,500 flats, 100 shops/retail units, 3.5 million sq ft of office space</li> <li>• O&amp;M services sub-contracted</li> <li>• Metropolitan owns the heating network and is responsible for negotiating and managing the connection of new buildings.</li> <li>• CHP + gas boilers</li> </ul>	<ul style="list-style-type: none"> <li>• a local energy company setup and wholly owned by Enfield Council</li> <li>• CHP, gas boilers in the short term → Energy from Waste</li> <li>• £15m HNIP funding + £15m from MEEF</li> <li>• Supply heat to over 12,000 homes, potentially extending into Haringey / Hackney</li> </ul> <div style="background-color: #e0e0e0; padding: 5px; text-align: center;"> <b>AMIDS, Renfrewshire</b> </div> <ul style="list-style-type: none"> <li>• Multi-phase development – Business Park.</li> <li>• Procurement underway for Design and Build + 5 yr Operate + Maintain</li> <li>• Ambient loop network with WSHP. Waste water heat recovery.</li> </ul>	<ul style="list-style-type: none"> <li>• 8yr build out programme with no stand alone delivery vehicle</li> <li>• The network and energy centres are wholly owned and operated by Islington Council</li> <li>• Dedicated inhouse team of specialists manage the network</li> <li>• Majority of demand for own building stock</li> <li>• Construction and O&amp;M contracted out</li> <li>• Currently CHP, gas boilers, heat pump (TfL ventilation shaft)</li> </ul>